

Patent claims

1. Enzyme,
characterized in that it has uracil-DNA glycosylase activity and is
completely inactivated when heated above about 60°C.
- 5 2. Enzyme according to claim 1,
characterized in that it has an amino acid sequence as shown in
SEQ.ID.NO: 1 or SEQ.ID.NO : 2 or a functional part thereof.
- a 10 3. Enzyme according to claim 1 ~~or 2~~,
characterized in that it is derived from an organism adapted to a cold
environment.
- a 15 4. Enzyme according to ^{claim 1} ~~any of the preceding claims~~,
characterized in that it is derived from an eukaryotic organism,
preferably from Atlantic cod (*Gadus morhua*).
- a 20 5. Enzyme according to ^{claim 1} ~~any of the preceding claims~~,
characterized in that it comprises a traceable label.
- a 6. DNA sequence,
a characterized in that it encodes the enzyme according to ^{claim 1} ~~any of the~~
a ~~claims 1-5~~.
- 25 7. DNA sequence,
characterized in that it comprises the nucleotide sequence given in
SEQ. ID. NO : 1 and/or SEQ. ID. NO : 2.
- a 8. DNA sequence according to claim 6 ~~or 7~~,
30 characterized in that it includes a promoter.

- a 9. DNA sequence according to claim 6, ~~7 or 8~~,
characterized in that it is contained in an expression vector, such as
a plasmid, a cosmid or a virus.
- a 5 10. DNA sequence according to ^{claim 6} ~~any of the claims 6-9~~,
characterized in that it comprises a traceable label.
- a 10 11. Micro organism,
characterized in that it includes a DNA sequence according to ^{claim 6} ~~any of
the claims 6-10~~.
12. Micro organism according to claim 11,
characterized in that it is a mammalian cell or a bacterium.
- a 15 13. Micro organism according to claim 11 ~~or 12~~,
characterized in that it is an *E. coli* strain.
- a 20 14. Method of preparation of an enzyme according to ^{claim 1} ~~the claims 4-5~~,
characterized in that it is prepared by extraction from naturally
occurring sources or by recombinant DNA technology, isolation from a resulting
mixture and purification to a desired purity.
- a 25 15. Use of an enzyme according to ^{claim 1} ~~any of the claims 1-5~~, in monitoring
an/or controlling a reaction system multiplying DNA sequences, such as a PCR
or LCR.
- a 16. Use of an enzyme according to ^{claim 1} ~~any of the claims 1-5~~ in carry-over
prevention procedures.

add C3